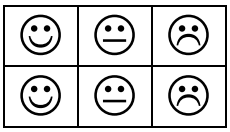
ALGEBRAIC FRACTIONS

A: I can simplify an algebraic fraction



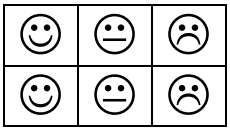
Simplify each fraction (on a suitable domain)

$\frac{12x^3}{4x^5}$ $\frac{x^2-16}{3x+12}$

$\frac{(x+1)^2}{(x+2)(x+1)}$ $\frac{x^2-3x+2}{x^2+3x-10}$

$\frac{x^2-9}{(x+3)}$ $\frac{x^2+3x+2}{x^2-2x-3}$

B: I can add and subtract algebraic fractions, express as a single fraction.



To add and subtract fractions we need a

c_____ d_____

Solve:-

$\frac{x}{4}+\frac{x}{3}$ $\frac{3x}{4}-\frac{2x}{3}$

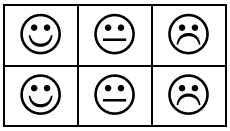
$\frac{2}{x}-\frac{x}{5}$ $\frac{1}{x}+\frac{2}{y}$

$\frac{5}{2x}+\frac{2}{3y}$ $\frac{x^2}{yz}+\frac{1}{xy}$

$\frac{x+1}{4}+\frac{x-2}{3}$ $\frac{3x+1}{4}+\frac{2x-3}{6}$

$\frac{2}{x+1}+\frac{3}{x+2}$ $\frac{2x}{x-4}-\frac{3}{x+3}$

C: I can multiply and divide algebraic fractions, express as a single fraction.



$\frac{5x}{4}\times\frac{x}{3}$ $\frac{2x}{15}\times\frac{5}{x}$

$\frac{20}{x^3}\times\frac{x}{5y}$ $\frac{-3x^2}{4}\times\frac{2}{x}$

$\frac{x}{4}\div\frac{y}{z}$ $\frac{x}{4}\div\frac{x}{2}$

$\frac{xy}{6}\div\frac{x^2}{3}$ $\frac{x^2y^2}{5}\div\frac{3x^2}{20}$